Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural Statistics Service
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CROP REPORT FOR WEEK ENDING APRIL 20

AGRICULTURAL SUMMARY

farmers had a good week for fieldwork. Many fields of corn were planted, especially in the central and southwestern regions of the state, according to the Indiana Agricultural Statistics Service. Tillage of fields continued along with spreading of fertilizer and spraying for weed and insect control. Rain slowed field activities in some areas during the week. Showers with isolated areas of thunderstorms and strong winds moved across the state during the weekend. Scattered fields of soybeans were planted last week. Seeding of spring oats and planting of mint made good progress during the week.

FIELD CROPS REPORT

There were 4.6 **days suitable for fieldwork**. Nine percent of the intended **corn** acreage is planted compared with 2 percent last year and 5 percent for the 5-year average. By area, 5 percent of the corn acreage is planted in the north and 11 percent in both the central and southern regions of the state. Soils warmed up last week. Farmers are still concerned about deficient soil moisture, especially subsoil moisture in some areas of the state. Anhydrous ammonia continued to be applied on many fields last week.

Fifty-seven percent of the **winter wheat** acreage is **jointed** compared with 48 percent last year and 61 percent for the 5-year average. Winter wheat **condition** improved and is rated 79 percent good to excellent compared with 61 percent last year at this time. Wheat growth and development continues to improve.

Major activities during the week were tillage of soils, spreading dry fertilizer, spraying chemicals, preparing planters, selling grain, planting potatoes, hauling manure, cleaning fence rows, purchasing supplies, along with taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 4 percent excellent, 42 percent good, 40 percent fair, 11 percent poor and 3 percent very poor. Pastures are now providing much of the feed for livestock. **Hay** supplies are rated 24 percent very short, 37 percent short, 38 percent adequate and 1 percent surplus. Livestock are in mostly good condition. Lambing and calving remain active.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
Corn Planted	9	1	2	5
Winter Wheat Jointed	57	26	48	61

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excel-lent
			Percent		
Pasture	3	11	40	42	4
Winter Wheat 2003	1	3	17	60	19
Winter Wheat 2002	1	7	31	48	13

SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
		Percent	
Topsoil			
Very Short	3	2	0
Short	12	6	0
Adequate	70	73	50
Surplus	15	19	50
Subsoil			
Very Short	6	7	0
Short	20	17	3
Adequate	66	66	63
Surplus	8	10	34
Days Suitable	4.6	2.9	2.2

CONTACT INFORMATION

–Greg Preston, State Statistician
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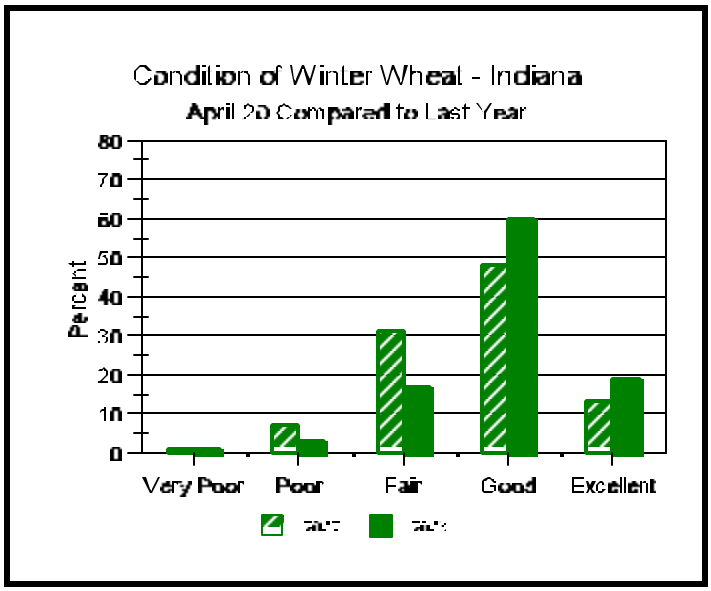
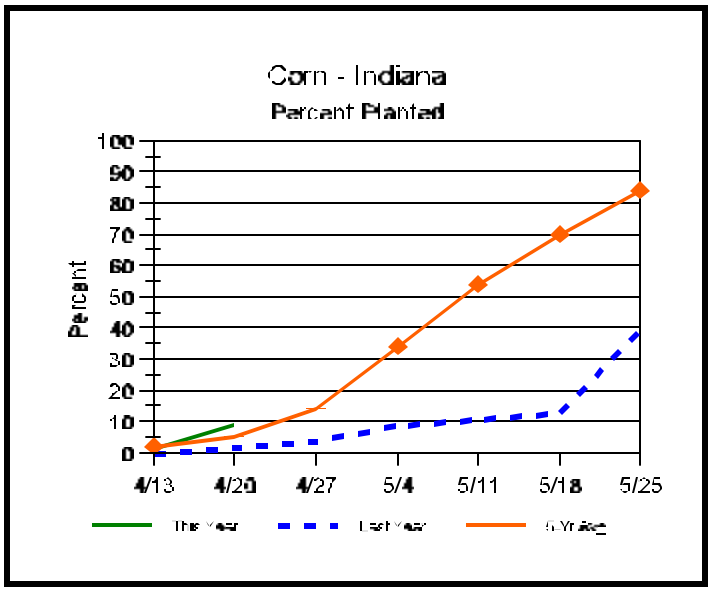
E-Mail Address: nass-in@nass.usda.gov
http://www.nass.usda.gov/in/index.htm

Crop Progress





Other Agricultural Comments And News

Western Corn Rootworm Winter Survival

- Beetle egg laying late last summer determines the potential threat to 2003 corn
- Rootworms overwinter as eggs in the soil and are quite durable
- Soil temperature and other variables can affect egg survival
- Tillage does not control rootworms

Three facets of corn rootworm biology will dictate the potential for rootworm damage to corn in 2003: 1) beetle egg laying in 2002, 2) the success of egg overwintering, and 3) larval survival and establishment.

1) Beetle egg laying in 2002: As already outlined in *Pest & Crop* #1, February 21, 2003, many first year corn fields in northern Indiana will be at risk from rootworm damage because of last year's western corn rootworm beetle numbers observed in soybean. This is also true of most corn following corn throughout the state. Simply put, more beetles last year laid eggs, which means greater risk for root damage this year.

2) Egg overwintering and survival: We have received questions this winter concerning the effects of temperature and tillage on overwintering rootworm eggs. After all, the Midwest experienced some low temperatures this winter. Rootworm egg survivability has been researched many times and in different ways in the past. To seek answers one must consider numerous variables such as, soil temperature, duration of temperature, soil moisture, soil type & texture, soil compaction, tillage type, residue cover, snow cover, and depth of egg. Researchers have conducted experiments in order to predict overwintering survival. A recent study was summed up as follows: "...factors such as soil moisture and temperature, which vary with soil depth and texture, and vary between and within years, make development of simple and highly predictable models of overwinter survival of western corn rootworm eggs difficult." Lab experiments with controlled conditions have studied the effect of temperatures on hatch. A two year study found that temperatures of 23 /F and 32 /F for 8 weeks resulted in 80% and 17% mortality respectively. Soil temperature data from Purdue's Agronomy Research Center, W. Lafayette during January (coldest period) averaged 30 /F (minimums) at 4-inch (bare soil) depth. According to the above research, we shouldn't rely on the winter's cold to significantly decrease rootworm numbers.

Tillage experiments (1940's to present) to control rootworms have yielded a mixed bag of results. The strategy is to move the eggs near the soil surface where they will be exposed to lower soil moisture and temperature; desiccation causes high egg mortality. Knowing the depth of the overwintering egg is critical before tillage is considered as a

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Weather Information Table

Week ending Sunday April 20, 2003

Station	Past Week Weather Summary Data							Accumulation April 1, 2003 thru April 20, 2003				
	Air Temperature				Precip.		Avg 4 in Soil	Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days	Temp	Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	85	28	59	+8	0.05	2	55	2.31	-0.03	7	119	+62
Valparaiso_AP_I	85	39	60	+11	0.26	1		2.11	-0.52	6	119	+82
Wanatah	86	31	57	+10	0.53	3	57	2.47	-0.06	7	98	+72
Wheatfield	86	30	59	+11	0.38	2		2.36	-0.17	6	123	+95
Winamac	83	39	60	+10	0.21	2	55	2.04	-0.42	6	122	+83
North Central(2)												
Plymouth	84	31	59	+8	0.00	0		1.78	-0.79	5	108	+64
South_Bend	85	40	62	+14	0.31	1		2.73	+0.14	6	125	+94
Young_America	83	40	60	+11	0.17	2		1.30	-0.97	7	122	+85
Northeast (3)												
Columbia_City	82	35	58	+11	0.03	1	53	1.77	-0.65	7	96	+72
Fort_Wayne	82	37	58	+9	0.00	0		2.01	-0.24	5	100	+66
West Central (4)												
Greencastle	81	37	61	+8	0.47	4		0.88	-1.52	7	130	+64
Perrysville	86	41	62	+11	1.06	2	55	1.82	-0.75	4	146	+94
Spencer_Ag	81	37	60	+9	0.42	3		1.07	-1.54	5	128	+72
Terre_Haute_AFB	82	41	63	+10	0.39	3		0.80	-1.73	5	153	+85
W_Lafayette_6NW	84	38	61	+11	0.36	3	60	1.92	-0.49	7	137	+97
Central (5)												
Eagle_Creek_AP	81	43	62	+9	0.41	2		0.73	-1.70	5	150	+89
Greenfield	82	43	61	+10	0.67	2		1.63	-0.99	5	133	+87
Indianapolis_AP	81	43	62	+10	0.55	2		1.00	-1.43	5	154	+93
Indianapolis_SE	81	44	61	+10	0.74	3		1.58	-0.83	5	138	+84
Tipton_Ag	81	32	57	+8	0.18	1	57	0.89	-1.68	4	99	+69
East Central (6)												
Farmland	82	37	58	+10	0.00	0	53	0.79	-1.58	4	105	+78
New_Castle	80	34	58	+9	0.00	0		0.86	-1.81	4	92	+62
Southwest (7)												
Evansville	82	44	64	+8	1.09	2		2.25	-0.40	5	182	+67
Freelandville	82	38	62	+9	0.49	2		1.18	-1.31	5	149	+70
Shoals	85	35	63	+10	0.75	2		1.38	-1.29	4	159	+81
Stendal	83	43	64	+10	0.88	2		1.73	-1.19	6	170	+76
Vincennes_5NE	84	38	63	+9	0.65	3	56	1.14	-1.35	6	154	+75
South Central(8)												
Leavenworth	82	46	63	+10	0.72	2		1.92	-1.16	7	160	+78
Oolitic	80	37	61	+9	0.60	2	57	1.83	-0.80	5	143	+78
Tell_City	83	50	66	+11	1.16	2		2.92	-0.29	5	206	+104
Southeast (9)												
Brookville	84	35	61	+11	0.00	0		1.01	-1.48	4	142	+97
Milan_5NE	82	37	61	+11	0.45	2		1.46	-1.03	6	134	+89
Scottsburg	83	37	62	+9	1.71	2		2.53	-0.25	6	150	+71

DFN = Departure From Normal (Using 1961-90 Normals Period).
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.

The above weather information is provided by AWIS, Inc.
For detailed ag weather forecasts and data visit the AWIS home page at
www.awis.com or call toll free at 1-888-798-9955.

control method. One study found 60% of the western corn rootworm eggs at a depth of 8-12 inches. Perhaps that is why researchers in one study concluded that "neither fall nor spring plowing can be recommended as a reliable method of controlling corn rootworms."

3) Larval survival and establishment: Here too many factors influence the survival of the newly emerged larva in the spring. Soybean sweeps in 1997 resulted in very high numbers indicating a high risk to first-year corn in 1998. However, heavy rains in late May and early June during egg hatch that season drowned many hatching larvae and damage was reduced. In short, barring environmental extremes such as drought or floods, hatched larva will find and begin feeding on corn roots within a few inches away.

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